

### BUILD IN VALUE WITH SUPER•COR<sup>®</sup> STRUCTURAL STEEL PLATE.



ANK

![](_page_1_Picture_0.jpeg)

We've been adding value to some of the world's most successful infrastructure projects for over 50 years.

![](_page_1_Picture_2.jpeg)

### Canada, we have your structural plate. And more.

Atlantic Industries Limited (AIL) is a world leader in valueengineered solutions using structural plate. Lightweight, strong and economical, AIL's Super-Cor® Structural Steel Plate is easy to ship and install with minimal equipment and labour requirements, making it ideal for remote locations. In fact, Super-Cor<sup>®</sup> is one of the most internationally-accepted and widely-used deep corrugation profiles available.

### A complete range of engineered solutions.

AIL offers a wide range of bridge and infrastructure solutions in structural plate, all engineered to deliver optimum performance and value for your particular application. We also provide supporting products like Headwalls, Wingwalls, and Guiderails, to make your projects

![](_page_2_Picture_4.jpeg)

even more convenient. Visit ail.ca to see the complete range of AIL products.

### A coast-to-coast network to support you.

With a Canada-wide network of sales teams, engineering offices and manufacturing facilities, AIL is a proven project partner ready to help you with full design and engineering support, as well as, dependable field service. Plus, as a

member of The AIL Group of Companies, we bring a world of resources and expertise to our projects in the transportation, rail, public works, mining, forestry and development sectors.

![](_page_2_Picture_9.jpeg)

![](_page_2_Picture_10.jpeg)

For project guidance and assistance, call toll-free 1-877-245-7473 or email info@ail.ca

![](_page_3_Picture_1.jpeg)

![](_page_3_Picture_2.jpeg)

AIL is your single source for a comprehensive engineered package including specifications, drawings, structure, footings, headwalls, wingwalls and fascia finishes.

![](_page_3_Picture_4.jpeg)

**Box Culvert Standard Arch** Low Profile Arch **Medium Profile Arch High Profile Arch** Round **Ellipse** 

### Premium, hot-dip-galvanized, deep-corrugated, structural steel plate for larger applications, including box culverts.

RECOMMENDED FOR

- Structural Plate Arches and Bridges F Grade Separations
- ► Road or Rail Underpasses ► Stream Crossings ► Box Culverts
- ► Heavy Haul Road Arches ► Stockpile Tunnels
- ► Storage Structures ► Portals and Canopies ► Culvert Relines

Super Cor<sup>®</sup> combines the advantages of lightweight construction with the superior strength and durability of deep-corrugated, galvanized steel to create some of the world's largest corrugated metal structures.

![](_page_3_Figure_13.jpeg)

The larger, annular corrugations in Super-Cor<sup>®</sup> provide nine times the stiffness of conventional structural plate, allowing it to withstand the heaviest of loads. Not only is Super-Cor<sup>®</sup> the most versatile and economical corrugation on the market, it is also the most internationally-accepted and widely-used.

- Revolutionary alternative to conventional bridges
- Handles extreme loadings
- Spans can exceed 25 m (82')
- Corrugation profile of 381 mm (15") pitch × 140 mm (5.5") depth
- Available in: Box Culverts; Standard, Low, Medium, or High Profile Arches; Rounds, and; Ellipses
- ▶ Bottomless designs are environmentally-friendly
- ► Available with Best•Kote Polymer Coating

![](_page_4_Picture_0.jpeg)

# Lightweight and super strong, Super-Cor<sup>®</sup> is the most internationally-accepted and widely-used deep corrugation profile.

![](_page_4_Picture_2.jpeg)

![](_page_4_Picture_3.jpeg)

### Available with Best-Kote Polymer Coating.

Best-Kote Polymer Coating can be used on all or part of Super-Cor<sup>®</sup> structures to enhance their performance and extend their design

service lives under harsh or corrosive conditions. Ask your AIL Technical Sales Representative for more details.

![](_page_4_Picture_7.jpeg)

+75 YEAR DESIGN SERVICE LIFE

![](_page_4_Picture_9.jpeg)

### **Applications Gallery**

![](_page_5_Picture_1.jpeg)

![](_page_5_Picture_2.jpeg)

Strong Larger, annular corrugations allow Super-Cor® structures to withstand the heaviest of loads.

![](_page_5_Picture_4.jpeg)

### Versatile

Long spans, shallow covers, a variety of shapes and reinforcement options extend Super-Cor's application range.

### Durable

Heavy-duty galvanized coating is bonded to surface. Optional Best-Kote Polymer Coating can extend service life to over 75 years.

![](_page_5_Picture_9.jpeg)

![](_page_5_Picture_10.jpeg)

![](_page_6_Picture_0.jpeg)

![](_page_6_Picture_1.jpeg)

### Economical

Super•Cor<sup>®</sup> is easy to ship and install with local crews and equipment, even in remote locations.

### Maintenance-Free

Unlike conventional structures, which frequently require retrofits, Super-Cor<sup>®</sup> is relatively maintenance-free.

Environmentally-Friendly

Made from recycled and recyclable steel, Super-Cor<sup>®</sup> structures typically install with less impact on stream beds and fish habitat.

![](_page_6_Picture_9.jpeg)

![](_page_6_Picture_10.jpeg)

## Super-Cor<sup>®</sup> Arches surpass the range of conventional plate arches with spans exceeding 25 m (82 ft). They can be installed with minimal environmental impact.

High-profile Super•Cor<sup>®</sup> arches are ideal for grade separations or in applications requiring large end areas or wider spans.

![](_page_7_Picture_3.jpeg)

### Your complete solution.

AIL is your single source for a comprehensive engineered package including the structure, footings, headwalls, wingwalls, fascia finishes and guiderail systems.

![](_page_7_Picture_6.jpeg)

### SAVE TIME AND MONEY

Super-Cor<sup>®</sup> structures erect quickly with less labour and transportation costs. In some cases, it is not necessary to interrupt vital 24-hour traffic.

![](_page_7_Picture_9.jpeg)

![](_page_8_Figure_0.jpeg)

### **Available Sizes**

Custom sizes/geometries are also available. Consult your AlL Technical Sales Representative.

Arch No.	Max. (mm)	Span (ftin.)	Bottor (mm)	n Span (ftin.)	Tota (mm)	l Rise (ftin.)	End (m²)	Area (ft.²)	Total S	Arch No.	Max. (mm)	Span (ftin.)	Bottor (mm)	n Span (ftin.)	Tota (mm)	l Rise (ftin.)	End / (m²)	\rea (ft.²)	Total S
SCA1	6990	22-11	6990	22-11	3495	11-5	19.20	207	27	SCA40	13500	44-3	13479	44-3	4612	15-2	50.12	540	45
SCA2	7250	23-9	7250	23-9	3625	11-11	20.60	222	28	SCA41	13980	45-10	13980	45-10	6985	29-11	76.70	826	54
SCA3	7510	24-8	7510	24-8	3755	12-4	22.10	238	29	SCA42	14000	45-11	13958	45-10	4877	16-0	54.88	591	47
SCA4	7640	25-1	7640	25-1	3820	12-6	23.70	255	30	SCA43	14000	45-11	13872	45-6	6543	21-6	75.91	817	54
SCA5	8000	26-3	7994	26-3	3594	11-9	23.53	253	30	SCA44	14000	45-11	13641	44-9	7009	23-0	83.57	900	57
SCA6	8030	26-4	8030	26-4	4015	13-2	25.30	272	31	SCA45	14500	47-7	14433	47-4	5150	16-11	59.87	644	49
SCA7	8290	27-2	8290	27-2	4140	13-7	27.00	290	32	SCA46	15000	49-3	14960	49-1	5232	17-2	62.15	669	50
SCA8	8550	28-1	8550	28-1	4270	14-0	28.70	308	33	SCA47	15000	49-3	14780	48-6	7022	23-0	87.32	940	58
SCA9	8800	28-10	8800	28-10	4400	14-5	30.40	327	34	SCA48	15000	49-3	14663	48-1	7351	24-1	92.90	1000	60
SCA10	9000	29-6	8983	29-6	3760	12-4	28.15	303	33	SCA49	15010	49-3	15010	49-3	7505	24-11	88.50	952	58
SCA11	9000	29-6	8724	28-7	5168	16-11	40.67	438	40	SCA50	15500	50-10	15441	50-8	5520	18-1	67.55	727	52
SCA12	9060	29-9	9060	29-9	4530	14-10	32.20	347	35	SCA51	15530	50-11	15530	50-11	7765	25-6	94.70	1019	60
SCA13	9320	30-7	9320	30-7	4660	15-3	34.10	367	36	SCA52	16000	52-6	15942	52-4	4922	16-2	64.47	694	52
SCA14	9500	31-2	9456	31-0	3956	13-0	31.54	340	35	SCA53	16000	52-6	15870	52-1	6666	21-10	89.41	962	59
SCA15	9580	31-5	9580	31-5	4790	15-9	36.00	388	37	SCA54	16000	52-6	15543	51-0	7982	26-2	111.11	1196	66
SCA16	9840	32-3	9840	32-3	4920	16-2	38.00	409	38	SCA55	16050	52-8	16050	52-8	8025	26-4	101.10	1088	62
SCA17	10000	32-10	9967	32-8	3961	13-0	33.14	357	36	SCA56	16500	54-2	16406	53-10	5168	16-11	69.78	751	54
SCA18	10000	32-10	9740	31-11	4547	14-11	38.93	419	39	SCA57	16570	54-8	16570	54-8	8280	27-2	107.70	1160	64
SCA19	10000	32-10	9690	31-9	5371	17-7	47.06	507	43	SCA58	17000	55-9	16930	55-7	5224	17-2	72.02	775	55
SCA20	10100	33-2	10100	33-2	5045	16-6	40.00	431	39	SCA59	17000	55-9	16909	55-6	6720	22-1	94.96	1022	61
SCA21	10360	34-0	10360	34-0	5175	17-0	42.10	453	40	SCA60	17000	55-9	16478	54-0	8483	27-10	124.98	1345	70
SCA22	10500	34-5	10476	34-4	3974	13-9	34.75	374	37	SCA61	17220	56-6	17220	56-6	8610	28-4	114.60	1233	66
SCA23	10870	35-8	10870	35-8	5435	17-10	46.40	500	42	SCA62	17500	57-5	17451	57-3	5285	17-4	74.29	800	56
SCA24	11000	36-1	10947	35-11	4193	13-9	38.53	415	39	SCA63	17600	57-8	17600	57-8	8800	28-10	121.60	1309	68
SCA25	11000	36-1	10697	35-1	4//6	15-8	44.86	483	42	SCA64	18000	59-1	1/921	58-10	5547	18-2	80.14	863	58
SCA26	11000	36-1	10642	35-3	5864	19-3	56.27	606	4/	SCA65	18000	59-1	1/886	58-8	6999	23-0	104.17	1121	64
SCA27	11590	37-4	11390	37-4	5695	18-8	50.90	548	44	SCA66	18110	59-5	10447	59-5	9068	29-9 10 5	128.90	1387	/0
SCA28	11010	37-9	11462	3/-/	4221	13-10	40.20	433	40	SCA6/	18500	60-8	1844/	60-6	5017	18-5 10_4	82.59	889	59
SCA29	11910	39-1	11910	39-1	2922	19-0 14.0	55./0	599	40	SCA68	19000	62-4	10912	02-1	2000	19-4	88.82	950 1105	61
SCA30	12000	39-4	11701	39-3 20.0	4209	14-0 10.0	42.02	452	41	SCA09	19000	02-4	10920	02-1	/099	25-5 21 F	110.10	1160	00
SCA31	12000	39-4	11/81	38-8 20.0	5039	18-0 20.0	57.10	015	4/	SCA7U	19150	62-10	19150	62-10	95/6	31-5 10.7	155.81	1550	/4
SCA32	12000	39-4	11012	38-U 40.0	6113	20-0	03.00	085 652	JU 10	SCA71	19500	04-0 66 2	19448	03-10	2700 10002	19-7 22 1	91.40	964 1722	02 70
SCASS	12430	40-9	12450	40-9	0210	20-4	00.00	409	40	SCA74	20190	00-3 67 11	20190	00-3 67 11	10005	24.0	160.00	1/22	/0
SCA34	12000	41-0	12447	40-10	4J01 6/170	14-9 21_2	40.20 65.80	490 709	43 50	SCA70	20700	60_7	20700	60_7	10500	34-0	100.30	1012	82
5(126	12940	42-0	12940	42-0	/1552	1/_11_	/12.10	510	14	SC 10	21210	73.0	21210	73_0_	11125	36.6	10/ 50	2004	86
SCA30	13000	42-0	12904	41-10	-4555 5890	19-4	-40.10 64 39	693	50	SCA26	22250	74-8	22250	74-8	11380	37-4	203.60	2094	88
5(13)	13000	42-0	12/45	41-10	6460	21-2	72.07	776_	53	SCAOO	22700	78-9	22/00	78_9	12040	39-6	205.00	2192	93
SCN30	13460	44-7	13460	44-7	6730	21-2	71 10	765	52	SCA94	25000	82-0	25000	82-0	12040	41-0	227.40	2440	96
JCKJ7	00+01	- <del>44-</del> 2	10400	- <del>44</del> -2	0750	22-1	71.10	705	JZ	JUN74	2,5000	02-0	2,5000	02-0	12300	41-0	243.40	2042	90

Structure numbers in bold denote single radius arch. All dimensions are to inside of crest of steel.

## Super-Cor<sup>®</sup> Boxes offer the perfect solution for long-span, low-rise situations with shallow cover.

Super•Cor® Boxes combine the strength and cost advantages of AIL's Super•Cor® corrugation profile with a special, patented reinforcement along the length of the structure. The extra strength of this reinforcement permits designs exceeding 17 m (56').

![](_page_9_Picture_3.jpeg)

### LOOKING GOOD

As shown here and opposite, Super-Cor<sup>®</sup> can be customized with many types of functional and attractive end treatments.

![](_page_9_Picture_6.jpeg)

### Your complete solution.

From preliminary specifications and drawings through to project completion, AlL is your single source for a comprehensive engineered package including the structure, footings, headwalls, wingwalls, fascia finishes and guiderail systems.

![](_page_9_Picture_9.jpeg)

![](_page_10_Picture_0.jpeg)

### **Structural Cross Section**

Typical Box Culvert Height of Cover 450 mm (17.7") to 1500 mm (59")

![](_page_10_Figure_3.jpeg)

![](_page_10_Figure_4.jpeg)

## Super-Cor<sup>®</sup> Box Culverts offer optimal clearance box and hydraulic flow geometry along with shallow covers.

### **Box Details**

### **Available Sizes**

Custom sizes/geometries are also available. Consult your AIL Technical Sales Representative.

STRUCTURE		SPAN			RISE			AREA		STRUCTURE	SPAN				RISE	AREA		
NUMBER	mm	ft	ft-in	mm	ft	ft-in	m <sup>2</sup>	ft²		NOWRER	mm	ft	ft-in	mm	ft	ft-in	m²	ft²
SB-3H	3527	11.571	11'7"	1457	4.780	4' 9"	4.37	47.04		SB-11H	11024	36.168	36' 2"	3128	10.262	10' 3"	26.90	289.54
SB-4L	3913	12.838	12' 10"	1321	4.334	4' 4"	4.67	50.27		SB-12L	12021	39.438	39' 5"	2713	8.901	8' 11"	25.47	274.15
SB-4H	3933	12.903	12' 11"	1638	5.374	5' 4"	5.70	61.35		SB-12H	12024	39.448	39' 5"	3360	11.023	11' 0"	31.66	340.78
SB-5L	5153	16.906	16' 11"	1629	5.344	5' 4"	7.06	75.99		SB-13L	13018	42.709	42' 9"	2901	9.518	9' 6"	29.91	321.94
SB-5H	5051	16.571	16' 7"	2032	6.667	6' 8"	9.06	97.52		SB-13H	13130	43.077	43' 1"	3572	11.719	11' 9"	36.59	393.84
SB-6L	6005	19.701	19' 8"	1695	5.561	5' 7"	8.48	91.28		SB14L	14011	46.000	46' 0"	3096	10.157	10' 2"	34.46	370.92
SB-6H	6093	20.000	20' 0"	2068	6.785	6' 9"	10.82	116.46		SB14H	14091	46.230	46' 3"	4012	13.163	13' 2"	44.84	482.64
SB-7L	7002	22.000	22' 0"	1966	6.450	6' 5"	11.23	120.88		SB-15L	15069	49.438	49' 5"	3116	10.223	10' 3"	36.58	393.73
SB-7H	7016	23.018	23' 0"	2363	7.753	7' 9"	13.97	150.37		SB-15M	15008	49.238	49' 3"	3593	11.788	11' 9"	41.64	448.20
SB-8L	8008	26.273	26' 3"	2232	7.323	7' 4"	14.40	155.00		SB-15H	15056	49.396	49' 5"	4323	14.183	14' 2"	49.50	532.80
SB-8H	8011	26.282	26' 3"	2700	8.858	8' 10"	17.86	192.24		SB-16L	16011	52.529	52' 6"	3188	10.459	10' 6"	39.05	420.32
SB-9L	9065	29.740	29' 9"	2055	6.742	6' 9"	15.24	164.04		SB-16M	16023	52.568	52' 7"	3895	12.779	12' 9"	49.37	531.40
SB-9H	9047	29.681	29' 8"	2585	8.481	8' 6"	19.30	207.74		SB-16H	16005	52.509	52' 6"	4493	14.741	14' 9"	57.23	616.00
SB-10L	10092	33.110	33' 1"	2287	7.503	7' 6"	18.76	201.93		SB-17L	17098	56.095	56' 1"	3519	11.545	11' 7"	47.36	509.77
SB10H	10108	33.162	33' 2"	2894	9.495	9' 6"	23.69	254.99		SB17M	17086	56.056	56' 1"	4157	13.638	13' 8"	56.26	605.56
SB-11L	11023	36.164	36' 2"	2448	8.031	8' 0"	21.21	228.30		SB-17H	17086	56.056	56' 1"	4844	15.892	15' 11"	64.91	698.67

All dimensions are to inside crest of steel.

## Super-Cor<sup>®</sup> Round structures permit construction of dramatically larger diameters than was previously possible with conventional structural plate pipe configurations.

**Round Details** 

![](_page_11_Picture_3.jpeg)

### **Available Sizes**

Custom sizes/geometries are also available.

Consult your AIL Technical Sales Representative.

Pipe No.	Diameter (mm)	Diameter (ftin.)	End Area (mm²)	End Area (ft.²)
SC66R	8400	27-7	55.4	596
SC68R	8650	28-5	58.7	632
SC70R	8910	29-2	62.3	671
SC72R	9170	30-1	66.0	710
SC74R	9430	30-11	69.8	751
SC76R	9690	31-10	73.7	793
SC78R	9950	32-7	77.7	836
SC80R	10200	33-6	81.7	879
SC82R	10460	34-4	85.9	925
SC84R	10720	35-2	90.2	971
SC86R	10980	36-0	94.6	1018
SC88R	11240	36-11	99.2	1068
SC90R	11500	37-8	103.8	1117
SC94R	12020	39-5	113.4	1221
SC98R	12530	41-1	123.3	1327
SC102R	13050	42-10	133.7	1439
SC106R	13570	44-6	144.6	1556
SC110R	14080	46-2	155.7	1676
SC114R	14600	47-11	167.4	1802
SC118R	15120	49-7	179.5	1932
SC122R	15640	51-4	192.1	2068

All dimensions are to inside crest of steel.

This common and very versatile shape is frequently chosen for culverts, sewers and sub-drains, but it can also be used for storage bins, access ways, tunnels, bridges, and storm water retention/detention systems.

![](_page_11_Picture_10.jpeg)

**THE STRONGEST** In mine sites around the world, Super-Cor<sup>®</sup> is used under huge stock piles.

![](_page_11_Picture_12.jpeg)

### Super•Cor® structures are manufactured in accordance with CHBDC, AASHTO and ASTM design requirements

	Wall Th	ickness				Tang	gent						
Specified Uncoated (T)			ted (T)	Ar	ea	Lengt	h (TL)	Moment	of Inertia	Section	Modulas	Radius of Gyration	
mm	in.	mm	in.	mm²/mm	in²/ft	mm	in.	mm <sup>4</sup> /mm	in <sup>4</sup> /in.	mm³/mm	in³/in.	mm	in.
4.3	0.17	4.19	0.16	5.846	0.23	109.8	4.32	14334	0.87	260	0.40	49.5	1.95
4.8	0.19	4.67	0.18	6.536	0.26	109.2	4.30	16039	0.98	291	0.45	49.5	1.95
5.5	0.22	5.41	0.21	7.628	0.30	108.2	4.26	18743	1.14	340	0.53	49.6	1.95
6.3	0.25	6.19	0.24	8.716	0.34	107.2	4.22	21446	1.31	389	0.60	49.6	1.95
7.1	0.28	7.00	0.28	9.808	0.39	106.2	4.18	24165	1.47	438	0.68	49.6	1.95
8.1	0.32	7.94	0.31	11.120	0.44	104.9	4.13	27424	1.67	492	0.76	49.7	1.96

### Installation

## Typical Structural Plate installation.

All's corrugated metal structures ship and install quickly and economically, with minimal equipment and labour requirements. Our Technical Teams will guide you through the complete project.

![](_page_12_Picture_6.jpeg)

Reinforced concrete footings are cast over the prepared site.

![](_page_12_Picture_8.jpeg)

The first arch segment is completely assembled on the ground.

![](_page_12_Picture_10.jpeg)

Then, it is lifted into place and bolted to the footings on either side.

![](_page_12_Picture_12.jpeg)

If specified, reinforcement ribs are then added.

![](_page_12_Picture_14.jpeg)

The segments bolt into base channels, integrated into the concrete.

![](_page_12_Picture_16.jpeg)

Layers of engineered backfill are added in sequential lifts.

![](_page_12_Picture_18.jpeg)

Plates then attach individually to make up other arch segments.

![](_page_12_Picture_20.jpeg)

Then the road surface is completed with safety barriers.

Super-Cor<sup>®</sup> structures distribute superimposed loads to the surrounding engineered backfill, so it is essential to use care during installation and backfilling to ensure proper performance. The following guidelines will help ensure a successful project.

### Excavation

Trench excavation will vary, depending on the nature of the *in situ* material. It is necessary to provide an excavated area that ensures adequate distance from soils with questionable structural integrity. If the native soil is stable, excavate only the area that is required to provide minimum bedding, backfill envelope and enough room for compaction equipment to manoeuvre. For stream crossing applications, local authorities will impose guidelines for construction activity.

### Foundations

Super-Cor® structures are flexible and can accommodate some differential settlement without distress. It is important, nevertheless, to minimize differential settlement by removing and replacing poor foundation material. Pile foundations often create differential settlement issues. Preparation should be confined to minimum, but practical, widths and should result in a uniform base for the structure. A bedding of loose material will provide a slight cushion and the bedding may be flat or shaped, depending on the structure configuration and construction methods being used. It is essential that all corrugations be filled.

### Assembly

A Super-Cor® structure arrives at the job site in bundles curved to the proper radius. Included are bolts and any other special hardware that may be required, as well as instructions and shop drawings listing all components. Assembly is easy, requiring relatively simple tools. Correct lapping, bolttightening and shape-monitoring are all important to achieve the correct design dimensions. Your AIL Technical Representative can provide information and assistance to those unfamiliar with structural plate assembly.

### Backfill

Super•Cor<sup>®</sup> structures require a stable, engineered backfill to retain their shape and structural integrity. The quality of the backfill envelope depends on the choice of material, placement of backfill, and compaction of the envelope. AIL will detail suitable backfill materials for the structures. A well-graded, free-draining, granular backfill is preferred. There is no substitute for an examination by a geotechnical engineer.

### Inspection

Inspection should be performed on a full-time basis by qualified personnel. Backfill is placed in a balanced manner in 150 mm (6") to 200 mm (8") lifts for the entire backfill envelope. Compaction testing is required to ensure that backfill material is compacted to the required drawings. It is necessary to utilize well maintained compaction equipment of the appropriate size and specification for the application and as referenced in the drawing notes.

### **End Finishes**

Special attention must be paid to beveled or skewed ends. Incomplete structural rings may need to be reinforced with steel or concrete (or tied back) to maintain structural integrity. Exercise caution when placing backfill around them to avoid distortion.

Standard End Finishes are:

- Squared
- Beveled
- Partially-beveled
- Skewed

![](_page_13_Picture_19.jpeg)

The CSPI Handbook of Steel Drainage & Highway Construction Products and the NCSPA handbook provide a new, detailed section on backfilling and the hydraulics of various steel structures. Your AlL Technical Sales Representative can provide you with a copy of this handbook.

![](_page_13_Picture_21.jpeg)

![](_page_13_Picture_22.jpeg)

### **Footing Options**

Super-Cor® packages come with a variety of footing options to suit various sites:

- Precast or cast-in-place concrete footings the most common footing type, in which a receiving angle is embedded in concrete.
- ▶ Steel footing pads used as a time-saving alternative to concrete footings in sites with non-erodible stream beds. If the site permits, footings should be buried a minimum of 600 mm (24") below flow line. Note: When footing pads are buried, the published end area of Super-Cor<sup>®</sup> will be reduced.
- ▶ Full steel invert for applications in erodible stream beds requiring a corrugated steel floor or invert. To prevent undermining of the invert, we recommend the use of an optional toewall for the upstream and downstream ends.

### **Concrete Footing**

![](_page_14_Figure_7.jpeg)

![](_page_14_Figure_8.jpeg)

\*Note: Space base channel so that 381 mm c/c spacing of slotted holes in long leg is maintained

### **Headwall Options**

In addition to enhancing their appearance, well-designed end treatments are essential to the structural and hydraulic performance of Super-Cor.®

- ▶ MSE Retaining Wall Systems with wire or concrete faces.
- Concrete, cast-in-place or precast
- ▶ Bolt-A-Bin<sup>®</sup> retaining wall systems
- Sheet Pile walls
- Welded wire gabion baskets

### **Coating Options**

Super•Cor's heavy galvanized coating is metallurgically-bonded to the steel surface, providing extended service life. Super-Cor® is supplied with a standard 915 g/m<sup>2</sup> (3 oz/ ft<sup>2</sup>) coating. A heavier 1220 g/m<sup>2</sup> (4 oz/ft<sup>2</sup>) coating is also available. Properly designed and installed, Super-Cor® structures will last over 100 years. Co-Polymer coatings are also available to further extend service life.

![](_page_14_Picture_19.jpeg)

### Corrugated Steel Footing

### FOR PROJECT GUIDANCE AND ASSISTANCE, CALL TOLL-FREE 1-877-245-7473, OR EMAIL INFO@AIL.CA

The information and suggested applications in this brochure are accurate and correct to the best of our knowledge, and are intended for general information purposes only. These general guidelines are not intended to be relied upon as final specifications, and we do not guarantee specific results for any particular purpose. We strongly recommend consultation with an Atlantic Industries Limited Technical Sales Representative before making any design and purchasing decisions.

![](_page_15_Picture_2.jpeg)

AlL products contain recycled content and are 100% recyclable.

### **ISO Certified**

In keeping with All's ongoing commitment to high standards, our Plate Manufacturing Facilities in Ayr, Ontario and Dorchester, New Brunswick, as well as our Engineering Department in Ayr, Ontario have been certified to ISO 9001:2008.

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AIL-698 02/2020

![](_page_15_Picture_7.jpeg)

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Atlantic Industries Limited

Atlantic Industries Limited is a member of THE AIL GROUP OF COMPANIES

![](_page_15_Picture_11.jpeg)

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![](_page_15_Picture_14.jpeg)

![](_page_15_Picture_15.jpeg)

![](_page_15_Picture_16.jpeg)

![](_page_15_Picture_17.jpeg)